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Using the capability approach to analyze contemporary environmental governance challenges in coastal Brazil

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Abstract: Conservation and development are often framed as a dichotomy, requiring trade-offs. But trade-offs can be due to the particular political situation and to relationships of domination, and are not necessarily the inevitable result of an intractable situation. Environmental governance in Brazil is in transition, with growing tension between those who seek a social-environmental approach and those who are strictly concerned with preservation. This article applies the capability approach framework to analyze the human development situation in Trindade, Brazil, by answering key questions that are central to this approach (1) What kind of lives are people able to live? Are they able to be or do what they have reason to value? and (2) What is the quality of economic, social and political relations in Trindade? Three main ‘shocks’ emerge as having major impacts on the way of life of community members: (a) Conflict with external commercial developers, (b) Paving of access road into community, and (c) Enforcement of a Federal Protected Area on historical community land and sea space. Capability priorities were established for women, men, older adults and people with disabilities. The impacts of development and conservation policies are different for the four groups, as are the priorities for capabilities. There is no single capability that is found in the top three priorities across the four groups. The case in Trindade demonstrates that space for public participation is not sufficient to ensure that the people who are trying to improve their wellbeing and be the author of their own lives can influence the outcome, and also shows that regular contact and connection does not necessarily create empathy, as Sen assumed in *The Idea of Justice*.

Keywords: Brazil, capability approach, commons governance, conservation, development, participation, protected areas

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I. Introduction

Protected natural areas have existed for millennia in Indigenous and community controlled lands, through endogenous governance systems, spiritual beliefs, sacred spaces, and other means. In many parts of the world, this changed through colonisation, and significant numbers of Indigenous peoples and local communities have been, and continue to be, displaced in the name of conservation and development (Tauli-Corpuz 2016). In Brazil, environmental governance is in transition, with growing tension between those who seek a social-environmental approach and those who are strictly concerned with conservation. Current policies demonstrate that there has been a shift to recognize the rights of Indigenous and traditional peoples, but actual practice shows that the values of economic development takes precedence over other considerations, and that in many instances conservation is also more highly valued than the wellbeing of Indigenous and traditional peoples.

This research project applies the capability approach framework to analyze environmental governance in a coastal community in Brazil. The capability approach is part of a development-oriented perspective that shifts the focus from people as a *means* to development, to having people as the *central focus* of development. In this approach human needs and freedoms are given priority, and there is a focus on agency and wellbeing. As Sen (1999, 2013) argues, people need to be actively involved in planning their future and not be the passive recipients of programs designed by others. The capability approach provides a framework to interpret the ability of a community to adapt to changes and to contextualize environmental conflict (Anand 2007; Griewald and Rauschmayer 2014). It provides a framework “which could help transform or create different social, economic and political arrangements from the ones which deepen inequality, undermine people’s opportunities to live well and destroy the environment” (Deneulin 2014, 3). The approach has also been applied to collective agency and institutions in environmental governance (Lethonen 2004; Pelenc et al. 2013).

In this paper, the capability approach is applied in two ways: to gather information on community-level priorities related to capabilities, and to analyze state-society relations as manifest in conservation and development approaches. We apply the capability approach to analyze human development in the community of Trindade, with a focus on commons governance. In looking at community-level priorities, the framework reveals diversity within marginalized groups. It considers how personal, social and environmental characteristics impact the ways in which capabilities are converted into functionings - how opportunities become achievements (Robeyns 2005).

The capability approach uses a normative language to understand and assess development situations. The approach primarily originates with Sen (1985), and emphasizes the point that economic behavior is not simply a phenomenon of rational individual choice. Rather, it is linked to freedom and constraints of what people value and what they can and cannot do. The capability approach provides a framework to analyze policy from a human development perspective that focuses on what people are actually able to achieve, and how policies can change towards expanding people's freedoms (Spence and Deneulin 2009). In order to assess if human development is improving, Sen argues that you need to not only evaluate what people are being and doing, called 'functionings' in the language of this approach, but also the real opportunities that they have to achieve a certain kind of life, called 'capabilities'. According to Sen, "capability reflects a person's freedom to choose between different ways of living" (1989, 44). Unlike capability scholars such as Nussbaum (2000) and Alkire (2002), Sen does not prescribe valuable functionings or capabilities. Rather, Sen believes that capabilities need to be identified through public reasoning, and that they vary across contexts.

1.1. The capability approach and the commons

The capability approach, which centers on human development, has enjoyed limited but increasing applications in the environmental area. Rauschmayer and Lessmann (2013, 4) raise the question as to how the theoretical framework of the capability approach can be applied in governance towards sustainable development. They suggest that "the work of Elinor Ostrom gives some hints how this can be done on a small scale". However, there seems to be little in the commons literature that engages with the capability approach. An exception is Jentoft et al. (2010), who use Sen's (1999) notion of freedom to point out that the 'tragedy of the commons' that leads to over-exploitation is not due to unlimited freedom as once commonly believed, but rather due to the restriction of freedom.

In conceptualizing the capability approach, Sen (1985, 1999) was applying the notion of freedom to development in general, but this issue is also a major concern in commons governance. Johnson (2004) has argued that two bodies of thought compete for a voice in the commons literature. One is primarily concerned with collective action, and the other influenced by notions of entitlement (Sen 1981). The latter focuses on the problem of creating resource access for poor

and vulnerable segments of society, but both use rules to analyze the dilemma of managing access to natural resources. Johnson (2004, 408) argues that

“They differ, however, in the normative value they ascribe to common property regimes and those whose livelihoods are dependent on resources it provides. Whereas ‘collective action scholars’ analyze the rules and sanctions that encourage individuals to conserve the commons, ‘entitlement scholars’ emphasize the historical struggles that determine resource access and entitlement, and the ways in which formal and informal rules create and reinforce unequal access to the commons.”

The Trindade case captures many of these issues. The people of Trindade have struggled to maintain their autonomy and quality of life through many difficult development stages. They are in struggle with Federal Government Parks authorities concerning a protected area that is being enforced on land and marine space that the community has used and managed for centuries. Using the capability approach in a case such as Trindade allows for assessing the normative framework of the local people, to bring to light the development outcomes that they value, and to expose how the historical context has shaped the rules that are impacting on access to common pool resources for community members.

1.2. Parks and people

The governance of protected areas throughout the world is often conflict-ridden. Much of modern conservation thinking viewed nature as either “fuel for modernist economic growth, or as something precious, needing absolute preservation” (Adams and Mulligan 2003, 6). This global conservation governance model included the common practice of preventing access to (or the eviction of) Indigenous peoples from protected areas, in the name of conservation (Spence 1999; Brockington and Igoe 2006; West et al. 2006; Wobse 2008; Agarwal and Redford 2009). The people-free nature model continues to dominate conservation in many countries, with little evidence of sharing of decision-making power with local communities (Borrini-Feyerabend et al. 2007). Although no definitive alternative model has emerged, it has been largely recognized that the current dominant protectionism of nature approach, which separates people from nature, is neither effective, nor achievable, nor just (Dowie 2009). However, very few papers have systematically examined justice and social equity in protected areas (Timko and Satterfield 2008).

The Brazil case discussed in this paper is not unique, but captures a universal issue in commons governance, whereby the capability approach may prove pertinent and useful. It involves a protected area case on lands that have been used by the Caiçara people, a mixed-heritage traditional group, for generations. There are many situations where Indigenous and traditional peoples have greatly reduced capabilities, or opportunities to do or be what they have reason to value, due to either resource development, or resource protection, or some combination of the two. At the same time there is a growing movement by Indigenous and traditional

people to assert their rights, move to self-determination in development, and expose the disproportionate costs accruing to them in the name of conservation. Conservation and development are still often framed as a dichotomy, requiring trade-offs. But trade-offs can be due to the political situation and to relationships of domination, and are not necessarily the inevitable result of an intractable situation (Valencia 2014).

After providing background and context on Trindade and a description of the methods of study, the paper will focus on two questions that are central to the capability approach (Sen 1985, 1999, 2009; Deneulin 2014): (1) What kind of lives are people able to live? Are they able to be or do what they have reason to value? and (2) What is the quality of social, political and economic relations in Trindade? The focus is at the local level, examining the relationship between the community and community institutions with Brazil's Federal Government, as the protected area in this case is within federal jurisdiction. The questions will be discussed using data from field research. The last two sections will then focus on how to transform, or make 'less unjust', the unjust structures identified.

2. Study area context

Located in the region of Paraty, in the southeast coast of the state of Rio de Janeiro, Trindade is situated in what remains of the Atlantic Forest, a highly threatened Brazilian bio-region. The green hills slope down to long stretches of sandy beaches and the inviting blue water of the Atlantic Ocean, with many swimming areas and a popular surfing spot. The term 'resource curse' is often used to describe areas that suffer from intense and competitive exploitation of resources. Trindade may suffer from a resource curse, as well as a 'desirability curse', in that the location and natural beauty make it desirable to more people than it can accommodate. This desirability underlies the history of intense efforts by outsiders to secure land ownership or take over control of natural resources and the likely economic gain from controlling these resources.

The main group of people living in Trindade, a community with a population of about 1,000 people (Bussolotti et al. 2010) or 228 households (Hanazaki et al. 2013), are Caiçaras, a mixed heritage group of Indigenous Peoples, Portuguese, and Africans. They are legally recognized as 'traditional people' due to their distinct characteristics, way of life and cultural identity, but without the same rights as Indigenous peoples, such as land tenure (although Indigenous peoples have to struggle to actualize these rights). Many of the Caiçara coastal communities were founded as slavery was ending in the middle of the 19th Century (Diegues 2005). The livelihoods of this population over time have primarily been small-scale fishing, agriculture, and agro-forestry with shifting cultivation, mainly for manioc (Fajardo 2005). Present day livelihoods are mixed, but fishing remains a primary activity in the majority of communities in Paraty and key to food security (Hanazaki et al. 2013).

Over the past fifty years, several significant development shocks have drastically impacted the capabilities of Trindade community members to live the

lives they have reason to value, as identified through the research efforts and will be described in detail in subsequent sections. The Caiçaras of Trindade have had to deal with exogenous changes, and they have a history of resistance and adaptation. They are again in a period of resistance and adaptation in response to the enforcement of a Federal protected area on community land and marine space. The protected area was established by the Federal Government in 1971, at a time when Brazil was under military dictatorship. This was also the time period when tourism in the region was growing, and as such land became a valued commodity and land-grabbing for commercial development became a problem for communities along the coast (Teixeira 2006). Interstate highway and local road access improvement also created major change to the community, as will be discussed.

The protected area was established without any consultation or input from the community, but the rules of the Park were not actually enforced until recent years. The Serra da Bocaina National Park (PNSB) is a protected area that falls under the authority of the *Instituto Chico Mendes de Conservação da Biodiversidade* (ICMBio)/Chico Mendes Institute for the Conservation of Biodiversity, the administrative unit of the Brazilian Minister of the Environment. The current conservation and development policies require a consultation process to establish a management plan for the protected area. This process with the community of Trindade began in mid-2012, and is described in detail in Bockstael et al. (2016). The management plan poses critical issues to multiple stakeholders in the community and impacts various types of natural resources. Implementation of the conservation policies requires public participation in the management plan. The public participation process is not fully accessible to the whole community. It is only a consultative process, so community representatives are allowed to provide their views on the management plan and request changes, but they do not have actual power to influence the document; the authorities make all final decisions (Bockstael et al. 2016).

The conservation and development policies in Brazil (SNUC 2000) are having an impact on Caiçaras' freedom to live the kind of life they have reason to value. As discussed in subsequent sections, the state is limiting livelihood options for Trindadeiros to activities related to tourism, as they see these as complementary to the conservation priorities of the protected area.

3. Methods of study

This study was conducted as interdisciplinary action research, and was part of a five-year team project in Paraty called "Community-based resource management and food security in coastal Brazil", that took place 2009–2014. For this portion of the research, data were collected through a mixed-methods qualitative approach from February 2013 until December 2014. Data collection included ongoing participant observation during the research period, numerous informal conversations and interactions, semi-structured interviews with key informants

on specific topics, narrative interviews with 33 participants, small group meetings, practical capacity development workshops, and participation/attendance in intra-community, inter-community and community-Parks meetings, and analysis of meeting minutes. The capacity development workshops were developed jointly with community members. They were designed to understand and meet protected area regulations, and to improve participation in the Park negotiation process. Using a variety of research methods allowed for triangulation to make sure local views and priorities were correctly understood.

The research benefitted from close work with a Brazilian field assistant who lived in Trindade before, during and after the research period informing this paper. She provided assistance with language, community contacts and data collection, and she provided insight into the many complexities of community relationships. After spending some time in the community developing relationships and observing community life, the data collection began with narrative interviews broadly inquiring about the impacts of changes to natural resources governance over time. These were completed with a total of 33 people, divided into youth (n=5), adult (n=15), people with disabilities (n=4), and older adults (n=9). A handful of interviews also took place with community leaders who were integral to the community-Parks negotiation process. Data from these interviews provided rich information both for capability assessment and for relationship assessment portions of the study. Analysis was guided by the capability-based evaluation questions constructed by Deneulin (2014), building on the work of Sen (2009) and Dreze and Sen (2013).

To explore the idea of specific capability priorities for different population groups, data were collected in meetings with small groups to establish a basic list of important capabilities, translated as *oportunidades* (opportunities), and to see what differences, if any, could be identified between groups. Questions were also focused on participants' particular concerns related to natural resources management. This was done through one small group session with women (n=7), two small group sessions with people with disabilities (n=8 and n=3), and two large group sessions with men (n=29 and n=26) in which the two sessions had nearly the same set of participants. After failed attempts to hold a group session with older adults, information was gathered separately through interviews with five participants. All participants lived in Trindade, with the exception of participants with disabilities. To include more people with disabilities, people from Paraty town and other nearby coastal communities were also included and meetings took place in Paraty town. There have been different attempts to generate capability sets, using surveys, focus groups & interviews (Clark 2003; Biggeri et al. 2006), and deductive reasoning (Nussbaum 2000). This research used the approach of small group meetings and interviews. The research was not designed to determine an exhaustive list of valuable capabilities for the community, but rather to explore the most important capabilities for different social groups.

For the group sessions, discussion was guided by three questions: (1) What are the most important opportunities that a person should have during his/her

life? (2) What are the three most important? (3) Do these opportunities exist in Trindade? The first question was answered with a ‘brainstorming’ exercise with the men. With the women, it was done by having each participant individually answer the questions and then compiling the answers. In both situations the participants then voted on which were the three most important opportunities, and then discussed if, and to what extent, these opportunities existed in their community. For the people with disabilities, time was spent prompting and probing with each individual, and sharing as a group. The group then discussed to what extent these opportunities existed in their lives, and what was missing, but did not vote on the top three. For the interviews with the older adults, these questions were asked, but there was no ‘brainstorming’ or sharing activity, nor the opportunity to discuss and prioritize and vote. With the men, women and older adults, specific questions related to natural resources governance were then posed.

All the data collected from the various methods used was used to inform the relationship assessment that demonstrates the complexity of the relationships within the community, and the historical struggles that continue to impact community relations with the state and other external actors. The following section presents the overall findings of the research.

4. Findings

4.1. Capability assessment

In this section the focus will be on addressing the question: “What kind of lives are people able to live? Are they able to be or do what they have reason to value?” (Sen 1985; Deneulin 2014). The development narrative that emerges through synthesizing the narratives of people in the community reveals that people are not fully able to live lives that they have reason to value. This is due to imposed policies and development decisions that have caused expansion and contraction of capabilities.

Three main shocks emerge as having major impact on the way of life of community members: (a) Conflict with external commercial developers, (b) Paving of access road into community, and (c) Enforcement of a Federal Government protected area on historical community land and marine area. These are described as shocks because they happened quickly and were outside the control of community members. The narratives describe these events as things that were not sought by the community, but that had both positive and negative impacts on their agency to pursue goals they have reason to value, on their autonomy and wellbeing in terms of opportunities for valuable beings and doings.

a) Conflict with external commercial developers

The BR 101 (Rio Santos) highway, Brazil’s primary coastal highway and part of the Pan-American Highway, opened in the Paraty area in the 1970s. The arrival of this highway is described as the trigger that led to the “land grabbers” (*grileiros*) coming

to Trindade, and the beginning of a protracted and violent conflict with a commercial development conglomerate. Problems for the community began in 1963/1964. A Brazilian businessman and politician 'sold' a nearby community, Laranjeiras, to an outsider, and the new 'owner' claimed he also owned Trindade and tried to get community members to pay a lease for living in Trindade. The lease was to be paid through labour to the owner. The community resisted. In 1970 the owner 'sold' Trindade to a multi-national company called 'Adela-Brascan', referred to as 'the Company' by community members. This led to a violent conflict that lasted for about ten years. Many of the families sold their land, usually under duress, or fled.

"If we didn't sell we would lose everything, because the land was theirs and we didn't have land documents to prove that it wasn't. But it was our right, we are natives." (man, adult)

Houses were burned, women and men experienced physical violence. Families who refused to leave lived in tents on the beach or sheltered high in the forested hills.

"In March 1973, gunmen invaded Trindade [Brazil was under a dictatorship at this time]...They got here and started burning down the houses and made a lot of other atrocities...In this village nothing remained, it was all cleared!" (man, older adult)

The conflict caused changes to livelihoods. Prior to this time, most men worked in industrial fishing boats outside of the community and would be gone for months at a time. Women were responsible for the farming, but they were not able to continue this activity.

"We lived from fishing and planting, but the farms were destroyed by the gunmen and the men couldn't leave the women here and go out to fish. Trindade was packed with gunmen." (man, older adult)

Ultimately a legal settlement was reached, with some land given to 'the Company', and some to the community. Some families returned, the community reorganized and plots of land were allocated to different families. A long-term community division, still in place, ensued from the conflict and the land redistribution, with concerns about the transparency and equitability of the process and covert personal relationships seeking personal gain by some community members with the 'company'.

How does a community recover from such a traumatic conflict and forced redistribution of land? The conflict has enduring consequences to capabilities. From a negative side, families no longer have as much area for farming. Some community members remain outside of the community. Some who sold their land are unable to return, although some managed to return and were able to secure other land. There is now recognition of the value of land as private property, and different worth of land and norms around land distribution and control.

“...our community had a culture in which I’m not the owner of the land...it was the land that owned us...From the arrival of that company on, this was practically abolished, this culture stopped. We started to value a little piece of land...But this didn’t exist before...there weren’t fences in Trindade. This didn’t exist, only from the arrival of the Company that their eyes were opened, for the land being worth a lot of money. And then our culture was over, the way we thought of living.” (man, adult)

Along with the change to the value of land and norms of land ownership, there is a legacy of fear and mistrust that forms part of the community culture, an important element to remember when we discuss the third major shock. Community members have also lost trust in relationships with each other and these divisions flared up when the most recent development pressure was brought to bear. From a positive side, as the conflict came to an end, women in the community formed a ‘Resident’s Association’. This was started by a small group of women who recognized that the community needed to be more united in their representation, and eventually became an association for all community members. This association provides structure for managing community affairs and space for public reasoning. Trindade has a reputation as being the most difficult community for the authorities to deal with, and their ability and motivation to organize and advocate for their rights may be a legacy of the conflict.

“...Trindade is the community in Paraty that most demands their rights. It has learned from that fight the meaning of being in front, fighting, not keeping quiet...There’s isn’t a community in Paraty that demands as much from the public power as Trindade does.” (man, adult)

So on the one hand the conflict fractured community affiliations, changed their relations to the natural resources that they depended on, devolved their land management system, and restricted their livelihood opportunities. On the other hand, they developed ability to organize and fight for their rights, and may have enhanced their sense of agency. Throughout the conflict the community did not receive assistance from authorities, and it seems the authorities were more supportive of the economic development of the area by the large corporation than in supporting the rights of the traditional population.

b) *Paved access road into community*

Approximately six km of what was a rough mud tract was paved in 1999/2000. The road was dubbed ‘*Deus meu livre/God save me*’ by local residents due to the very steep hill that was often impassable before it was paved. It now provides regular and reasonably easy access into the community from the BR 101 highway. This infrastructure development initiative allowed for a massive increase in the number of tourists accessing Trindade. This change has had a transformative effect on the community that in many ways did enhance the agency and wellbeing of community members, but also has many negative effects.

Although tourism is the main source of income for most community members, there continues to be a mix of livelihood activities. A handful of people exclusively fish and some also continue with small-scale farming. This is due in some cases to the seasonality of tourism. The list of problems attributed to the growth of tourism is substantial, including social and environmental issues and issues with infrastructure. Trindade does not have proper water and sanitation infrastructure for its own population, let alone for the massive numbers of tourists who descend on the community during high season. The social issues raised are familiar to other places that experience growth in tourism (Harrison 2001). Parents are concerned for the safety of their children with the number of outsiders and the influx of drugs. They remember the past when everyone in the community was known and children had more freedom. Parents of older children worry about exposure to drugs, and also worry that if there are no livelihood opportunities they youth may get involved with selling drugs. There are people in the community who visibly struggle with alcohol and drug issues. The amount of vehicular traffic on the small community road and the crowds also restricts peoples' freedom of movement and peacefulness.

Many community members describe that prior to the paved road, they had difficulties with movement in and out of Trindade to buy and sell goods and to access education for their children. The road has facilitated community movement for school, commerce and others, but it also allowed for rapid increase in numbers of tourists. The type of freedom people had has changed, with mixed results. As one older woman stated: "Now it's become easier, but I liked it better before." Two of the major problems that impact the wellbeing of community members, sanitation and water, are being exacerbated by the restrictions placed by Federal authorities, which leads into the third development shock.

c) Enforcement of protected area

The conservation and development policies being enforced in Trindade are having a high cost to the local population, in terms of restrictions of capabilities.

In brief, the implementation of the conservation policies involve a series of restrictions and actions that prohibit community members from continuing traditional activities or maintaining income generating activities that developed with and contributed to the growth of tourism. For instance, closing beach side restaurants operated by community members has meant that many people lost a key livelihood activity, and this has had secondary effects as local fishers have lost customers. Livelihoods of those who work directly with tourists on the beach are also being impacted, for a number of reasons. The Park authorities are preparing to limit the number of tourists who can visit one of the main natural attractions, so the revenue for the associated boat trips will decrease. The protected area will have limited visiting hours, and tourists will have to pay a Park entry fee. Local people who have lived in this area for generations will also have to follow set visiting hours, unless they receive permission for special activities, on a case-by-case basis, and guests of a local community member will have to pay the entry fee (with the exception of immediate family members).

At the same time as restricting the tourism-based livelihoods, the policies are also geared to reducing or preventing traditional activities. Fishing is still a hotly contested issue but the long-term stated goal by Park authorities is to prevent fishing in the adjacent marine area, the main fishing area for the community. On separate occasions, the Park authorities have told community members that they must either choose between continuing with tourist activities or reverting entirely to traditional activities. They have told people that they do not have a choice, they must give up traditional activities, as they no longer need them for their livelihood now that they earn income from tourism.

As mentioned, the large number of tourists have put pressure on the infrastructure and exacerbated waste management issues. There is no sewage treatment facility, and much of the sewage runs untreated into a stream and into the ocean. For many years the Residents Association has fundraised and planned the construction of a sewage treatment facility. Construction began, and then was halted by the Park authorities, claiming that the land was within the protected area and therefore the construction was illegal. This is a telling policy decision about how serious Park authorities are about 'conservation', as it seems they would rather have untreated sewage flowing into the beach and ocean within the protected area than having a treatment facility built within the boundaries. There are also challenges with the volume of garbage and the drinking water supply. Community members are worried about continued access to the water source (a waterfall) as it is considered to be in the protected area and therefore Park authorities could restrict access.

A number of people expressed that it was the community members who have protected the area through their own way of life and initiatives, and now are being treated unfairly.

"It's tough, and what we feel is that, that you are in a territory that you have protected all your life, and you don't have your name on the land, the land is not yours. The state simply comes and says it is a Park here and you are treated as a criminal, because they created a park on the top of your head."
(woman, youth)

While ostensibly focused on conservation, protected area policies also appear to be linked to economic development, as the Park authorities will charge an entry fee to tourists and thus redirect income from the community to the government. Finally, the Park authority is also planning to build a 'Visitor Centre' to receive tourists, which ironically is expected to have a museum about Caiçara people. The location of the entry to the protected area may also redirect visitors away from the other commercial areas in the community that are outside the protected area, and therefore reduce income generation in these other community spaces.

Examining the first two development shocks, it is evident that there have been both positive and negative outcomes. The third shock, the policy to impose a specific type of protected area that was originally established without consultation,

biological study, or concern for local population, however, is causing significant capability deprivation for the local community. This is consistent with how protected areas were established in Brazil through the 1970s and the 1980s. The public participation process in place is still confined to fit within a pre-established set of rules, and the community has no power in decision-making. The policies are diminishing tourist revenue, destroying local business, reducing markets for selling fish, limiting livelihood options, and restricting access to the land and sea for cultural activities. These effects are all negatively impacting the wellbeing and agency of the local community.

Taken together, the three areas of development shocks described in this section have costs and benefits to the local population. Research participants have expressed appreciation for increased economic level and less arduous lifestyle, and more security with diversification of livelihoods. They do weigh this against loss of freedom to take part in decisions about their lives, social issues, environmental issues, loss of self-determination and community control, change of culture and traditions, and ability to choose to continue to live in the community. It is important to recognize that the impacts of development and conservation policies are varied for different social groups, as are the priorities for capabilities. The remainder of this section is based on data collection focused on the identification of important capabilities, translated into '*oportunidades*', or opportunities, for different social groups.

4.2. Capability priorities

The analysis to determine the capability priorities for the different social groups is primarily based on data collected through the small group meetings and individual interviews that were designed to identify and prioritize capabilities. Table 1 provides a summary of the top three priorities of women, men, people with disabilities, and older adults. As there were only three people with disabilities participating in Trindade, additional participants were sought from nearby communities to make up the sample. Interestingly, there is no capability that is found in the 'top three' across the four groups. There is no previous research that desegregates capability priorities across different social groups, and the results indicate that an important consideration in determining development policies would be the difference identified between the social groups in this study, recognizing that the number of participants is small. People with disabilities are also an under-researched cohort, but form a significant population size (1 billion people/1 in 7, WHO 2011).

Are the capability priorities identified attainable? The capability to be educated exists at the primary school level within the community. Secondary education is available in the nearby city of Paraty, requiring access to personal or public transport. However, the quality of education is a concern, with the women expressing disappointment in the quality and dissatisfaction that the curriculum does not include their traditions and knowledge. People with disabilities struggle with access to any level of education, with Brazilian schools only recently being man-

Table 1: Capability priorities of different social groups.

Women (n=7)	Men (n=26)	People with disabilities (n=11; 9 men and 2 women)	Older adults (n=5; 3 women and 2 men)
1) Quality family life	1) Take care of health	1) Access to education	1) Stay in place (especially for children/ grandchildren)
2) Education/Access to knowledge	2) Take care of family	2) Job/earn money	2) Access to natural resources
3) Good health	3) Be happy	3) Security/dignity	3) Peace

dated to be 'inclusive', but with a lack of teacher training or real knowledge about making schools inclusive for all kinds of ability sets, and many of them have very exclusive infrastructure.

Both women and men felt that there was limited access to health care directly in the community, with a recently established community health post. There did not seem to be a shared understanding about how often a doctor was staffing the health post. For the people with disabilities, there were barriers to the most important capabilities that they identified. A common concern for this population is access to employment, and this is indeed the case for this group in Paraty. Participants with disabilities value both security and dignity in equal measure, and both are areas of concern. Because they are primarily living in the poorest parts of their communities that are identified as having a lot of criminal activity, they have more concerns for personal security. They also struggle with attitudes of other people and describe being teased and mocked.

Although these capabilities depend on a number of factors, in the Trindade case almost all of the capabilities identified are connected to natural resources and land tenure, raising the possibility of land being a larger social capability, a meta-capability (Holland 2008). The discussions by the women and men related to health, quality family life, taking care of family, and happiness, were discussed in the context of remaining in the community and continuing with the multitude of activities that make up their lifestyles and livelihoods. The capability to achieve good health is based on both having access to health care, but also to living in a healthy place, as Trindade is generally perceived as being. Quality family life and taking care of family, and happiness, were connected to availability of work in the community so that families can stay together, and the enjoyment of working on the beach, fishing, and working collaboratively.

The older adults particularly value secure land tenure and access to the natural resources as a capability, which is also connected to their other top capabilities of being able to stay in place and live in peace. These are all areas of concern linked to conservation policies, and their attainability is linked to these policies. For men, being happy and taking care of family were both linked to their ability to continue to work with tourists on the beach and with their boats, and to fishing rights. Health concerns are also linked to environmental health with water

and sanitation issues as described. In summary, participants value their freedom to pursue the activities that define them as Caiçaras. They value what they are lacking or what they are at risk of losing. Being able to achieve desired outcomes is linked to the quality of relationships and existing power dynamics, and these concerns frame the second question in a capability-based assessment.

4.3. Relationship assessment

Using the capability approach framework, the second question evaluates relationships. Specifically, the question is: What is the quality of economic, social and political relations in Trindade? (Deneulin 2014). The actors in the relationships have changed over time, but the essence of the relationships has been fairly consistent; community members struggling for recognition against external forces imposing change. In the case of the conflict with external commercial developers, the community received no protection or assistance from authorities and suffered greatly. The successive rapid growth in tourism provided many community members with the opportunity to receive economic benefits, but again the community received no assistance from the government to help develop necessary infrastructure, or bring any kind of order to the rapid and overwhelming growth in tourism. In the current situation, the relationship between Park authorities and community members can be characterized as a relationship of domination of subordinates.

The hierarchy of policy priorities in the current phase places conservation at the top, followed by tourist experience, with the wellbeing of the local population in last place. Policies are based on conservation priorities. Park authorities appear to be struggling to balance conservation with tourist experience, and presumably with the plans for the associated revenue from tourism. The negative impacts of these policies are being borne by the local population, raising issues of distributional justice. There is no sharing of decision-making power, nor any consideration of benefit sharing (Borrini-Feyerabend et al. 2007), despite this being one of the many requests raised by the community through their participation in the public consultation process. In effect, although there are some benefits to the community, it is also the community that bears all the cost. Public reasoning exists on the part of the community to a certain extent, such as in the community associations and in the negotiations with Park authorities, and community members actively participated in the consultation process, but the power imbalance frustrates and limits their efforts. There are even special requirements in policy about the needs and rights of the Caiçara people, but these also contain caveats that ultimately allow Park authorities to make any decision necessary when justified in the name of conservation.

The approach taken by the Park does give reason to question if the policy priorities are really about conservation. The Park authorities did not develop a base of knowledge about the current state of the environment beyond the management plan prepared in 2002, before imposing conservation regulations. So the regulations are not being enforced in direct response to documented issues spe-

cific to this location. The direct benefits of the current policies are realized by the government, as the Park authorities will eventually have a new stream of tourist revenue, and they will be able to report an increase in the percentage of land that is under conservation. In addition to undermining people's wellbeing and agency, these policies may be self-defeating. Conservation benefits are unknown as there have not been baseline studies, or evaluation about the actual impact of traditional activities. For example, preventing community fishing in the adjacent marine area is likely to have limited benefit on fish stocks, as industrial fishing continues near the area and the current state of fish stocks is unknown (Lopes et al. 2013).

Livelihood diversification is promoted in the development literature as a way to meet development objectives (Ellis 1999). But current policies in Trindade constrain livelihoods by focusing on only two activities, tourism and commerce. Community members who are hostile to Park authorities and refusing to recognize their legitimacy may have held a more positive position had the Park approached the community to build a collaborative relationship with concern for wellbeing. Given that the current conservation arrangements have produced neither political nor economic benefits to Trindade (Wright et al. 2015), it might be expected that a community directly adjacent to a protected area and suffers from its existence may not be motivated to assist in protecting that area (Agarwal and Redford 2009).

The direct social relationships between community members and Park authorities seem to follow one of two patterns. There are some community members who have direct and regular interactions with Park authorities, who clearly explain their needs and wants, talk about their issues and concerns, express the importance of their traditional identities and advocate for recognition of these identities and the associated livelihoods. Other community members refuse to negotiate with the Park, and on one observed occasion prevented a meeting from taking place with the Park authorities in the community. There are ongoing challenges with social relationships within the community between those who favour divergent means to address the challenges and relate to the authorities. People seen as being close to Park authorities risk being accused of colluding with the Park and seeking personal benefit. There is little evidence of empathy being consistently developed by people on either side of the issue, one of the conditions of Sen's approach to making a situation more just (Sen 2009). It raises an interesting question as to whether empathy can develop or be influential in a situation where there is ongoing conflict.

5. Discussion

The capability approach is useful for the study of commons because of the insights it brings, showing that entitlement thinking can help analyze commons governance, and in particular, issues of resource access and control. Entitlement thinking, showing that historical struggles with external commercial developers have shaped resource access and control, helps provide context. It also helps interpret the ability of the community to adapt to changes and to deal with conflict

(Griewald and Rauschmayer 2014). Formal rules of government conservation create and reinforce injustice with respect to access to the commons (Brockington and Igoe 2006; Timko and Satterfield 2008). Does the 'new' economy of tourism compensate for reduced access to commons?

The Caiçara people are being treated as though they freely chose to change their traditional way of life. But this is not the case; they lived through and adapted to incursions and exogenous changes. They are being told that they can no longer maintain traditional livelihood and cultural activities because they are gaining economically from tourism, at the same time as their incomes are reduced due to 'conservation' restrictions. In fact it is ostensibly the focus of 'conservation' by the Brazilian Parks authority, but actions suggest that the focus is more towards capturing tourist revenue for the state, rather than a priority of conservation. Actions certainly demonstrate that 'conservation' is more highly valued than any local concern.

At the same time, Caiçara culture is being promoted as an interesting piece of Brazilian heritage. The website of the Caiçara Museum located in Ubatuba, near Paraty, claims that "As part of the Brazilian coastal cultures, Caiçaras represent a strong link between man and his natural resources, generating a rare example of a harmonious community with its environment. Every day, tourists and adventurers who seek the Southeast coast as shelter for their holiday, come into contact, without knowing, with one of the most beautiful and ancient Brazilian cultures" (Toffoli and Mansur 2015). The protected area authorities also revealed plans to include a Caiçara museum in the eventual Park visitor's centre (to be built on the beach where the Park tore down all the local restaurants) for the preservation of cultural heritage. It appears that in practice 'culture' is valued as a tourist attraction, useful for economic growth, and not as an actual ongoing way of life (Idrobo et al. 2016).

Analyzing the development trajectory and current situation in Trindade using the capability approach reveals that the three development shocks demonstrate a lack of agency freedom, defined as "freedom to achieve whatever the person, as a responsible agent, decides he or she should achieve" Sen (1985, 203). Sen has emphasized the responsibility aspect of freedom: "Freedom to choose gives us the opportunity to decide what we should do, but with that opportunity comes the responsibility for what we do – to the extent that they are chosen actions. Since a capability is the power to do something, the accountability that emanates from that ability – that power – is a part of the capability perspective, and this can make room for demands of duty" (Sen 2009, 19). Following this line of argument, a pathway to change would be to increase the agency freedom for both community members, as well as for Brazilian Parks authority staff who are working directly at the community level. Our analysis has been critical of Brazilian conservation priorities, but it must be made clear that staff members operating on the ground are bound by institutional regulations and Federal policies. Institutional culture in Brazil for environmental decision-making is top-down (Lopes et al. 2013). Empowering the staff to make local level decisions may provide the freedom

and opportunity to work collaboratively with communities and allow empathetic relationships to develop. It is possible that compassion cannot develop or may be repressed when there is no agency freedom to act on that compassion.

Current conservation policies mandate participation as part of the management process, but a further step is needed to institute a democratic process that gives stronger voice to participants to influence the outcome, to have real power in the decision-making process. Conservation requires awareness on the part of the community of the state of the environment, not only for local needs, but also for national and international objectives. Through public reasoning, shared values may emerge between community members and staff persons around balancing conservation and livelihoods (Berkes 2007). Although Sen (2009, 336) was referring to the freedom of the press, the following is applicable to a new relationship between authorities and community members in Trindade: “informed and unregulated *formation of values* requires openness of communication and argument... New standards and priorities...emerge through public discourse, and it is public discussion, again, that spreads the new norms”.

These norms and values are far from uniform in any given community. The present project was an exploration into ideas about capabilities of different social groups and implications for environmental governance. There are not enough data to make conclusive comparisons amongst groups but enough to demonstrate interesting differences between them that might have policy implications. The results (Table 1) demonstrate that it is important to identify people’s capability priorities and gaps, and that these results are more policy relevant than trying to determine a global list of priorities. The research documents the value of using the capability approach to frame the situation, diagnose injustice, and identify pathways to developing more just arrangements. One of the barriers to finding more just outcomes is the historic context.

Community members have explained how the development shocks described in this paper have caused divisions and prevented unity within the community; absence of collective identity can hamper political mobilization efforts (Valencia 2014). Public reasoning may help community members reconnect to their diminished collective identity by finding other points of similarities and shared values (Sen 2009). Improved space for public reasoning would also allow for needs of different people to be considered. Shifting livelihoods to depend exclusively on tourism does not allow for recognition of the diverse needs, conditions, and circumstances of individuals and families (Robeyns 2005). Therefore, even though all people may equally lose agency freedom with the imposed livelihood changes, different groups may be differentially impacted, and some may face significantly reduced wellbeing than others.

6. Conclusion

Environmental governance in Brazil is in transition, with growing tension between those who seek a balance between conservation and local development, and those

who equate conservation with preservation. Current policies demonstrate that there has been a shift to recognize the rights of Indigenous and traditional peoples, but actual practice shows that the values of national level economic development takes precedence over all considerations, and that in many instances conservation is also more highly valued than the wellbeing of Indigenous and traditional peoples.

People of Trindade, as in many other Indigenous and rural communities around the world, are advocating for their resource rights and cultural way of life as traditional people, and are demonstrating pride in and organizing around their cultural identity, valuing identity and rights that are threatened (Tauli-Corpuz 2008; Bambaze 2012). International conservation policy is also moving towards more inclusive and participatory processes (Kothari et al. 2013), and away from a kind of conservation based on the separation of people and nature. With the capability to influence the outcomes of conservation and development comes increased responsibility, as with capability comes obligation. Many Indigenous and rural peoples around the world have traditionally relied on the natural resource base. With increased knowledge through public participation processes, and through secure land and resource rights, they could be empowered to ensure that local ecosystems continue to be the source of larger social capability, a meta-capability, which they need (Holland 2008). Greater space for people to advance the goals they have reason to value, combined with improved public reasoning (Sen 2009) and participation, may also transform the relationship between authorities and community members into one of non-domination (Forst 2014), and bring about structural changes that allow for shared power in decision-making.

While the findings of the research support the argument proposed by Sen (2009), that reducing injustice can be done by public reasoning and by increasing space for participation in a political process, the research also demonstrates that in certain cases there needs to be a questioning of the distribution of power. The Trindade case demonstrates that merely having space for public participation is not sufficient to ensure that the people who are trying to improve their wellbeing and be the author of their own lives can influence the outcome. It also shows that regular contact (as in the Parks process) does not necessarily create empathy, as Sen assumed in *The Idea of Justice*. In the area of environmental governance, Sen's argument would perhaps hold at the local level with groups that have mutually interdependent needs. But across levels with vast differences in power, there needs to be a plan for power redistribution and arbitration, as the vested interests of the powerful will otherwise likely triumph (Armitage et al. 2007). As the Trindade case demonstrates in such an emotionally contested area as environmental protection, empathy for the other may not develop.

Policy implications of this paper include giving more agency to local-level staff, supporting capacity development for community members and community institutions, and increased space and support for public reasoning. As action research, the current project demonstrates the possibility of involving a university-based team acting as a 'third-party' mediator or bridge between the community and the agency. Research team members and community actors worked together

on comprehensive courses that improved participant understanding of the systems that were being imposed on them, and increased their ability to negotiate with authorities (Bockstael 2017).

At a higher level of governance, one change would be to adjust the Parks regulatory framework to respond to international calls to action. Tauli-Corpuz (2016) pointed out that a ‘new paradigm’ for protected areas has been in the works since the Durban Accord and Action Plan of 2003. The original Plan included provisions for self-governance by Indigenous peoples and local communities, with two relevant calls to action: (1) All existing and future protected areas shall be managed and established in full compliance with the rights of Indigenous peoples, mobile peoples and local communities; and (2) Protected areas shall have representatives chosen by Indigenous peoples and local communities in their management proportionate to their rights and interest. These calls for action have since been confirmed and updated in various international statements and documents, such as the *Vision of the Promise of Sidney* (IUCN 2014).

These calls provide an opportunity, supposedly to be fostered by the Government of Brazil, for local participation in the management, and even control, of the protected area. However, in Brazil as elsewhere, very little progress has been made on moving these actions into practice. The capability approach highlights the need for the local community to be engaged as governing body for the protected area, as they have been the custodians of the biological and cultural diversity to be protected. The key question for Trindade, and other communities in a similar situation, is whether the community has the capability to maintain that biocultural diversity and make it thrive. If not, what are the capacity development needs (Bockstael 2017) to strengthen and support that capability? In parallel, what are the structures impeding these capabilities, and what changes are necessary to provide an enabling environment?

The use of the capability approach to analyze commons governance allows for a more contextualized understanding of the situation and inclusion of local views and values, to understand if people are able to live the lives they have reason to value. In particular, collecting data from different social groups, in separate settings, allows for a more nuanced understanding of the concerns and priorities of these groups and the quality of the economic, social and political relations. Commons research would benefit from more entitlement thinking and use of the capability approach. There are very few examples of trying to identify capability priorities in a participatory manner in developing country contexts, but such information is clearly relevant to commons management with equity and social justice.

Literature cited

Adams, W. M. and M. Mulligan. 2003. Introduction: Conservation and decolonization. In *Decolonizing Nature: Strategies for Conservation in a Postcolonial Era*, eds. W. M Adams and M. Mulligan, 1–15. London: Earthscan.

- Agarwal, A. and K. Redford. 2009. Conservation and Displacement: An overview. *Conservation and Society* 7(1):1–10. <https://doi.org/10.4103/0972-4923.54790>.
- Alkire, S. 2002. *Valuing Freedoms. Sen's Capability Approach and Poverty Reduction*. Oxford: Oxford University Press.
- Anand, P. B. 2007. Capability, Sustainability, and Collective Action: An Examination of a River Water Dispute. *Journal of Human Development* 8(1):109–132. <https://doi.org/10.1080/14649880601101465>.
- Armitage, D., F. Berkes, and N. Doubleday, eds. 2007. *Adaptive Co-Management: Collaboration, Learning, and Multi-Level Governance*. Vancouver: UBC Press.
- Bambaze, V. 2012. *State of the World's Minorities and Indigenous Peoples*. London: Minority Rights Group International. <http://www.unesco.org/library/PDF/MRG.pdf>.
- Berkes, F. 2007. Community-Based Conservation in a Globalized World. *Proceedings of the National Academy of Sciences* 104(39):15188–15193. <https://doi.org/10.1073/pnas.0702098104>.
- Biggeri, M., R. Libanora, S. Mariani, and L. Menchini. 2006. Children Conceptualizing their Capabilities: Results of a Survey Conducted during the First Children's World Congress on Child Labour. *Journal of Human Development* 7(1):59–83.
- Bockstael, E., N. C. F. Bahia, C. S. Seixas, and F. Berkes. 2016. Participation in Protected Area Management Planning in Coastal Brazil. *Environmental Science and Policy* 60:1–10.
- Bockstael, E. 2017. Critical Capacity Development: An Action Research Approach in Coastal Brazil. *World Development* 94:336–345.
- Borrini-Feyerabend, G., M. Pimbert, M. Taghi Farvar, A. Kothari, and Y. Renard. 2007. *Sharing Power: A Global Guide to Collaborative Management of Natural Resources*. London, UK: Earthscan.
- Brockington, D. and J. Igoe. 2006. Eviction for Conservation: A Global Overview. *Conservation and Society* 4(3):424–470.
- Bussolotti, J. M. 2010. *Fortalecimento do Mosaico Bocaina: estruturação, comunicação levantamento de práticas sustentáveis no território do Mosaico*. Relatório Técnico de Progresso para o Centro de Conservação da Biodiversidade (CBC-Brasil). Cunha: Conselho do Mosaico Bocaina e Caminhos de Cunha.
- Clark, D. A. 2003. Concepts and Perceptions of Human Well-being: Some Evidence from South Africa. *Oxford Development Studies* 31(2):173–196.
- Deneulin, S., ed. 2009. *An Introduction to the Human Development and Capability Approach: Freedom and Agency*. London: Earthscan.
- Deneulin, S. 2014. *Wellbeing, Justice and Development Ethics*. London: Routledge.
- Diegues, A. C. 2005. The Caiçaras of Mamanguá. In *Mamanguá: Marine Nursery and Traditional Stronghold of the Caiçaras*, ed. P. Nogar, 8–14. Brazil: Iphis Grafica e Editora.

- Dowie, M. 2009. *Conservation Refugees: The Hundred-Year Conflict Between Global Conservation and Native Peoples*. Cambridge: Massachusetts Institute of Technology.
- Dreze, J. and A. Sen. 2013. *An Uncertain Glory: India and its Contradictions*. London: Penguin Books.
- Ellis, F. 1999. Rural Livelihood Diversity in Developing Countries: Evidence and Policy Implications. *Overseas Development Institute Natural Resource Perspectives*, 40. London: Overseas Development Institute. <http://www.odi.org/resources/docs/2881.pdf>.
- Fajardo, E. 2005. A Culture Between the Sea and the Rainforest. In *Mamangua: Marine Nursery and Traditional Stronghold of the Caiçaras*, ed. P. Nogara, 6–7. Brazil: Ipsis Grafica e Editora.
- Forst, R. 2014. Justice and Democracy in Transnational Contexts: A Realistic View. Paper presented at the Human Development and Capabilities Association Conference, Athens, September 2–5.
- Griewald, Y. and Rauschmayer, F. 2014. Exploring an Environmental Conflict form a Capability Perspective. *Ecological Economics* 100:30–39.
- Hanazaki, N., F. Berkes, C. S. Seixas, and N. Peroni. 2013. Livelihood Diversity, Food Security and Resilience Among the Caiçara of Coastal Brazil. *Human Ecology* 41(1):153–164. <https://doi.org/10.1007/s10745-012-9553-9>.
- Harrison, D., ed. 2001. *Tourism and the Less Developed World: Issues and Case Studies*. Wallingford, UK: CABI Publishing.
- Holland, B. 2008. Justice and the environment in Nussbaum’s “Capabilities Approach”. Why Sustainable Ecological Capacity is a Meta-Capability. *Political Research Quarterly* 61(2):319–332. <https://doi.org/10.1177/1065912907306471>.
- Idrobo, C. J., I. J. Davidson-Hunt, and C. S. Seixas. 2016. Produced Natures Through the Lens of Biodiversity Conservation and Tourism: The Ponta Negra Caiçara in the Atlantic Forest Coast of Brazil. *Local Environment* 21(6):1132–1150. <https://doi.org/10.1080/13549839.2015.1075479>.
- IUCN. 2014. Vision of the Promise of Sidney. *World Parks Congress*. <http://www.worldparkscongress.org/downloads/about/THE%20PROMISE%20OF%20SYDNEY%20Vision%20eng%20version%20final%2019%20Nov.pdf>.
- Jentoft, S., P. Onyango, and M. M. Islam. 2010. Freedom and Poverty in the Fisheries Commons. *International Journal of the Commons* 4(1):345–366.
- Johnson, C. 2004. Uncommon Ground: The ‘Poverty of History’ in Common Property Discourse. *Development and Change* 35(3):407–433.
- Kothari, A., P. Camill, and J. Brown. 2013. Conservation as if People also Mattered: Policy and Practice of Community-Based Conservation. *Conservation and Society* 11(1):1–15. <https://doi.org/10.4103/0972-4923.110937>.
- Lehtonen, M. 2004. The Environmental-Social Interface of Sustainable Development: Capabilities, Social Capital, Institutions. *Ecological Economics* 49:199–214. <https://doi.org/10.1016/j.ecolecon.2004.03.019>.

- Lopes, P. F. M., E. M. Rosa, S. Salyvonchik, V. Nora, and A. Begossi. 2013. Suggestions for Fixing Top-Down Coastal Fisheries Management Through Participatory Approaches. *Marine Policy* 40:100–110.
- Nussbaum, M. 2000. *Women and Human Development: The Capabilities Approach*. New York: Cambridge University Press.
- Pelenc, J., M. K. Lompo, J. Ballet, and J. L. Dubois. 2013. Sustainable Human Development and the Capability Approach: Integrating Environment, Responsibility, and Collective agency. *Journal of Human Development and Capabilities: A Multi-Disciplinary Journal for People-Centered Development* 14(1):77–94. <https://doi.org/10.1080/19452829.2012.747491>.
- Rauschmayer, F. and O. Lessmann. 2013. The Capability Approach and Sustainability. *Journal of Human Development and Capabilities: A Multi-Disciplinary Journal for People-Centered Development* 14(1):1–5. <https://doi.org/10.1080/19452829.2012.751744>.
- Robeyns, I. 2005. The Capability Approach: A Theoretical Survey. *Journal of Human Development* 6(1):93–114. <https://doi.org/10.1080/146498805200034266>.
- Sen, A. 1985. Well-being, Agency and Freedom: The Dewey Lectures 1984. *Journal of Philosophy* 82(4):169–221. <https://doi.org/10.2307/2026184>.
- Sen, A. 1989. Development as Capability Expansion. *Journal of Development Planning* 19:41–58.
- Sen, A. 1999. *Development as Freedom*. Oxford: Oxford University Press.
- Sen, A. 2009. *The Idea of Justice*. Massachusetts: Belknap Press of Harvard University Press.
- Sen, A. 2013. The Ends and Means of Sustainability. *Journal of Human Development and Capabilities: A Multi-Disciplinary Journal for People-Centered Development* 14(1):6–20. <https://doi.org/10.1080/19452829.2012.747492>.
- SNUC (Sistema Nacional de Unidades de Conservação). 2000. Lei Federal 9985/00.
- Spence M. 1999. *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*. New York: Oxford University Press.
- Spence, R. and S. Deneulin. 2009. Human Development and Policy Analysis. In *An Introduction to the Human Development and Capability Approach*, ed. S. Deneulin, 276–299. London: Earthscan.
- Tauli-Corpuz, V. 2008. *The Concept of Indigenous Peoples' Self-Determined Development or Development with Identity and Culture: Challenges and Trajectories*. Philippines: Tebtebba Foundation, UNESCO. http://portal.unesco.org/culture/en/files/37745/12197591975Concept_paper_Indigenous_Peoples_Development_with_Identity.pdf/Concept%2Bpaper%2BIndigenous%2BPeoples%2B%2BDevelopment%2Bwith%2BIdentity.pdf.
- Tauli-Corpuz, V. 2016. *Report of the Special Rapporteur of the Human Rights Council on the Rights of Indigenous Peoples*. United Nations. Available: <http://unsr.vtaulicorpuz.org/site/images/docs/annual/2016-annual-ga-a-71-229-en.pdf>.

- Teixeira, C. R. 2006. As Transformações na Baía de Ilha Grande. *Revista Ciências Humanas* 12:41–51.
- Timko, J. A. and T. Satterfield. 2008. Seeking Social Equity in National Parks: Experiments with Evaluation in Canada and South Africa. *Conservation and Society* 6(3):238–254. <https://doi.org/10.4103/0972-4923.49216>.
- Toffoli, D. and G. Mansur. 2015. *Museu Caiçara*. Accessed February 18. <http://www.muscai.com.br/caicaras/>.
- Valencia, A. 2014. Human Rights Trade-Offs in a Context of “Systemic Lack of Freedom”: The Case of the Smelter Town of La Oroya, Peru. *Journal of Human Rights* 13(4):456–479. <https://doi.org/10.1080/14754835.2014.960962>.
- West, P., J. Igoe, and D. Brockington. 2006. Parks and Peoples: The Social Impact of Protected Areas. *Annual Review of Anthropology* 35:251–277. <https://doi.org/10.1146/annurev.anthro.35.081705.123308>.
- World Health Organization. 2011. *World Report on Disability*. Geneva: WHO.
- Wobse, A. K. 2008. Civilizing Nature: National Parks in Transnational Historical Perspective. *German Historical Institute Bulletin* 43:178–184.
- Wright, G. D., K. Andersson, C. Gibson, and T. Evans. 2015. What Incentivizes Local Forest conservation efforts? Evidence from Bolivia. *International Journal of the Commons* 9(1):322–346. <https://doi.org/10.18352/ijc.494>.